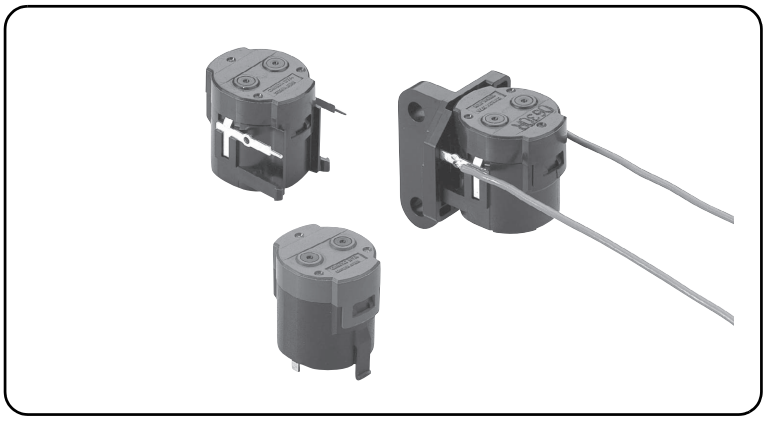
D7A

Automatic Horizontal Vibration Sensor

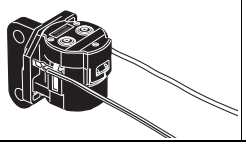
Quickly Detect Earthquakes to Help Prevent Secondary Disasters. Auto-level Mechanism Enables Mounting at ±5°.



- **Auto-level mechanism for mounting leeway of ±5°.**
- **Models provided for mounting to horizontal PCBs, vertical PCBs, or with screws.**

RoHS Compliant

■ Ordering Information

Appearance	Mounting type	Model
	Horizontal mount	**D7A-1**
	Vertical mount	**D7A-2**
	Screw mount	**D7A-3-1**

■ Performance

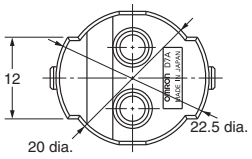
Item / Model / Type		D7A-1 Horizontal mount	D7A-2 Vertical mount	D7A-3-1 Screw mount
Operating characteristic	Acceleration range	90 to 170 gals*		
Output	Contact form	SPST-NO		
	Electrical ratings	5 μA to 1mA at 3 VDC		
	Contact resistance	Initial value: 1 Ω max. (measured at terminals)		
Basic specifications	Electrical life expectancy	10,000 operations (at 10 to 20 operations/min with resistive load of 1 mA at 3 VDC)		
	Degree of protection	IP40 (switch section)		
	Operating temperature	−30 to 70°C (with no icing or condensation)		
	Storage temperature	−40 to 70°C (with no icing or condensation)		
	Operating humidity	25% to 85%		
	Dielectric strength	250 VAC, 50/60 Hz for 1 min		

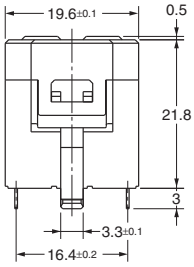
* This is the average value of three measurements that were taken with the continuous horizontal vibration method with periods of 0.3 s, 0.5 s, and 0.7s.

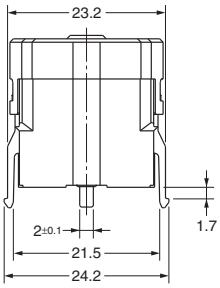
Note: Ask your OMRON representative for details.

■ Dimensions (Unit: mm)

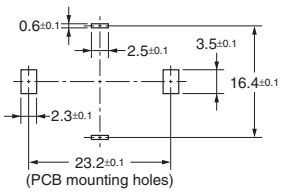
D7A-1





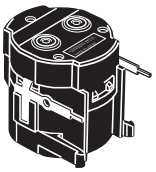


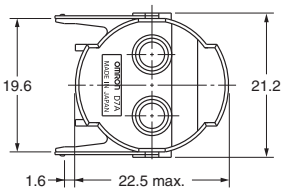
PCB Mounting Holes

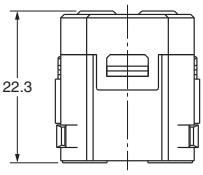


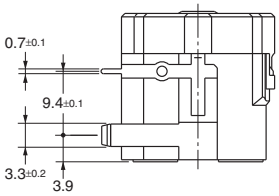
Note: Mount the Vibration Sensor to a PCB with a thickness of 1.6 mm and solder it.

D7A-2

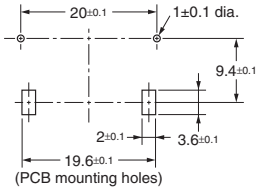






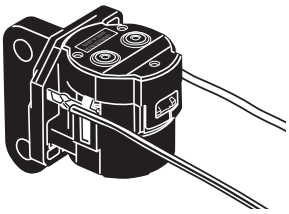


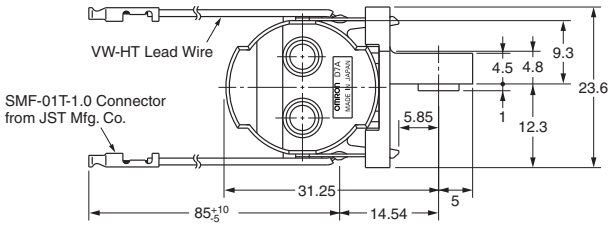
PCB Mounting Holes

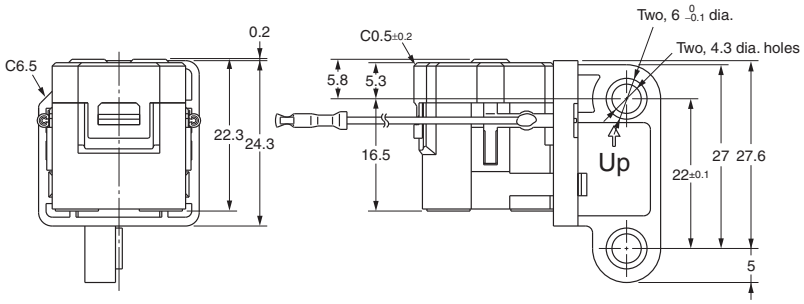


Note: Mount the Vibration Sensor to a PCB with a thickness of 1.6 mm and solder it.

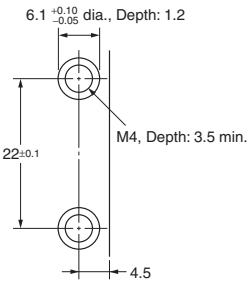
D7A-3-1







Mounting Hole Dimensions



Note: Mount the Vibration Sensor with M4 mounting screws or the equivalent and tighten the screws to a torque of 0.981 to 1.176N·m

■ Safety Precautions

- These Vibration Sensors are precision devices. Handle them with care. Never use a Vibration Sensor that has been dropped. Also, if a Vibration Sensor has been subjected to excessive shock, do not handle it as a normal Vibration Sensor and inspect it again or take other measures to confirm proper operation.

OMRON Corporation
ELECTRONIC AND MECHANICAL COMPONENTS COMPANY **Contact: www.omron.com/ecb**
Cat. No. A218-E1-01
1012(O)